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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KNAPP, JUSTIN R

ART UNIT PAPER NUMBER

2182

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,959

Applicant(s)

JEPPSEN ET AL.

Examiner

Justin Knapp

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Kase et al (Kase), USPN 6,047,340.
3. As per claims 1, 7, 13, and 19, AAPA teaches in one conventional storage arrangement, a computer node includes a host processor and a HBA. The HBA is coupled to a data storage device. A host processor in the computer node issues a first data transfer request that complies with a first protocol. The HBA converts the request into one or more other data transfer requests that comply with a second protocol (see page 1, [0002].

AAPA does not explicitly teach if an amount of data requested to be transferred by a data transfer request according to the first protocol exceeds a maximum data transfer amount permitted to be requested by a single data transfer request according to a second protocol, generating one data transfer request according to the second protocol and a data structure, the one data transfer request requesting transfer of a portion of the data, the data structure comprising one or more values identifying, at least in part, another portion of the data; and

modifying, at least in part, another data structure based, at least in part, upon the one or more values, the another data comprising, prior to the modifying, at least in part of the another

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data structure, one or more other values indicating, at least in part, one or more parameters of the one data transfer request.

Kase teaches a system that transfers data. First a transfer request is initiated and the amount of data requested by the transfer is obtained (figure 2, steps 21 and 22). The amount of data which can be transferred is then detected (step 23). A determination is then made if the amount of data of the transfer request is greater than the amount of data which can be transferred, the data is divided into blocks of data that are transferable and the transfer is made (steps 24-26). A list (figure 3, #13 and figure 10) is a modifiable data structure that keeps track of addresses (values) that are used to keep track of the blocks of data during the transfer as well as commands (parameters) of the data transfer request (column 9, line 64 through column 10, line 39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Kase within the system taught by AAPA. Doing so, a method for transmitting data, an apparatus for transmitting data and the medium can desirably transmit data more efficiently and achieve a high speed transmission with a higher reliability (Kase, column 4, lines 32-37).

4. As per claims 2, 8, 13, and 21, AAPA in view of Kase teaches issuing the one data transfer request to storage (Kase, step 21).

5. As per claims 3, 8, and 14, AAPA in view of Kase teaches the one or more values indicate at least in part at least one of:

a number of data transfer requests according to the second protocol that, when executed, result in transfer of data; and an identification of the one data transfer request (see Kase, figure 10).

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6. As per claims 4, 10, and 16, neither AAPA nor Kase explicitly teaches the first protocol comprises a SCSI protocol; and the second protocol comprises a SATA protocol. However, it would have been obvious to one of ordinary skill in the art that the teachings of AAPA in view of Kase would be applicable to multiple protocol situations as no matter what protocols are in the system, the same problems are trying to be solved.

7. As per claims 5, 11, and 17, AAPA in view of Kase teaches issuing the one data transfer request; and after modifying, at least in part, of the another data structure, issuing another data transfer request according to the second protocol, the another data structure comprising, after the modifying, at least in part, of the another data structure, one or more additional values indicating, at least in part, one or more parameters of another data transfer request (Kase, figures 10-12 show modifying a list having values and parameters for the data request).

8. As per claims 6, 12, and 18, AAPA in view of Kase teaches the another portion of the data is identified, at least in part, in terms of at least one of one or more sectors of storage and an address value (figure 10, #201 shows portion of data are identified by their addresses).

9. As per claims 20-22, AAPA in view of Kase teach the necessary hardware (processor, circuit board, bus, storage) needed to operate the methods taught in the rejections above.

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Knapp whose telephone number is (571)272-4149. The examiner can normally be reached on Mon - Fri 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571)272-4083. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Knapp
Examiner
Art Unit 2182

jrk


KIM HUYNH
PRIMARY EXAMINER
9/6/05